

BRAHMS Group & reorganization plans for HI at ATLAS PHOBOS/BRAHMS

F.Videbaek

BRAHMS Personnel

- Scientific Staff
 - F.Videbaek (Group Leader, BRAHMS spokesperson)
 - D.Beavis (project manager)
 - C,Chasman
 - R.Debbe
 - J.H.Lee (Run coordinator run-5, run-6)
 - Postdoc position vacated Feb 06, not filled.
- Support
 - TOF, Cherenkov and TPC's
 - Trigger systems and DAQ
 - Experiment management
- Research
 - Group members have given 11 invited and contributed talks at DNP, PANIC, DIS, SQM, CIPANP & GRC.
 - Group is leading BRAHMS analysis and publication effort for pp spectra analysis, Single Spin Asymmetries, and dA at forward rapidities.
- Future
 - Group will complete BRAHMS analysis and publications.
 - 3 members will/has started working on ATLAS (see next couple of slides)
 - Will also be involved with STAR at RHIC. Discussion on specific involvement ongoing.

Support Staff

- Technical Staff
 - E.Baker (mech.Tech)
 - R.A.Scheetz (el. Engineer)
 - J.Hammond (el.Tech)
 - M.Echamalian (1/2 time secr.)
- Tasks
 - Support of BRAHMS experimental and group infrastructure
 - Participating in STAR DAQ upgrade design and construction.
 - Participate in construction of ZDC for ATLAS

ATLAS HI effort at BNL

Background

- Plans to participate with a BNL HI group in ATLAS has been underway for some time (last S&T) with growing interest and concrete efforts.
- Just last week a detailed plan of US NP involvement was presented to DOE office of nuclear science

People

- **M.Baker, P.Steinberg, R.Nouicer** (PHENIX/ PHOBOS) (See P.Steinberg contribution)
- **R.Debbe, JHLee, F.Videbaek** (BRAHMS/ STAR) (~50% in coming years)
- **S.White** (PHENIX) (~50%)
- **Jiangyong Jia** (PHENIX) Joint hire with Chemistry- SunySB (~60%)
- Total effort of ~11 heads with modest increased FTE over the coming years.
- Postdoc(s) / student(s) highly desirable in coming years (FY08->)
- Plan to maintain a guest program to increase collaboration with non-US ATLAS HI groups. (2-3 people for a couple of month). Cost effective.

Vision for BNL ATLAS HI group

- **Become a visible key group in ATLAS HI physics**
- **Leading the ZDC project in ATLAS.**
- **Coordination of the USATLASHI computing effort with RACF**

Physical Organization

- **Common office space and administration in Physics.**
- **Rooms have been identified in Physics.**
- **F.Videbaek will become group leader**

ZDC project

- **S. White – collaboration with M. Zeller group (Yale)**

HI computing

- **Coordination with ATLAS particular Tier 1 and HI Tier-2 computing**

Physics Analysis

- **Wide array of interest; day-1 physics; min-bias ; jet-correlations; low-x physics**

Current plan is to initiate this group by FY07, with consolidation in Physics late calendar year 07.

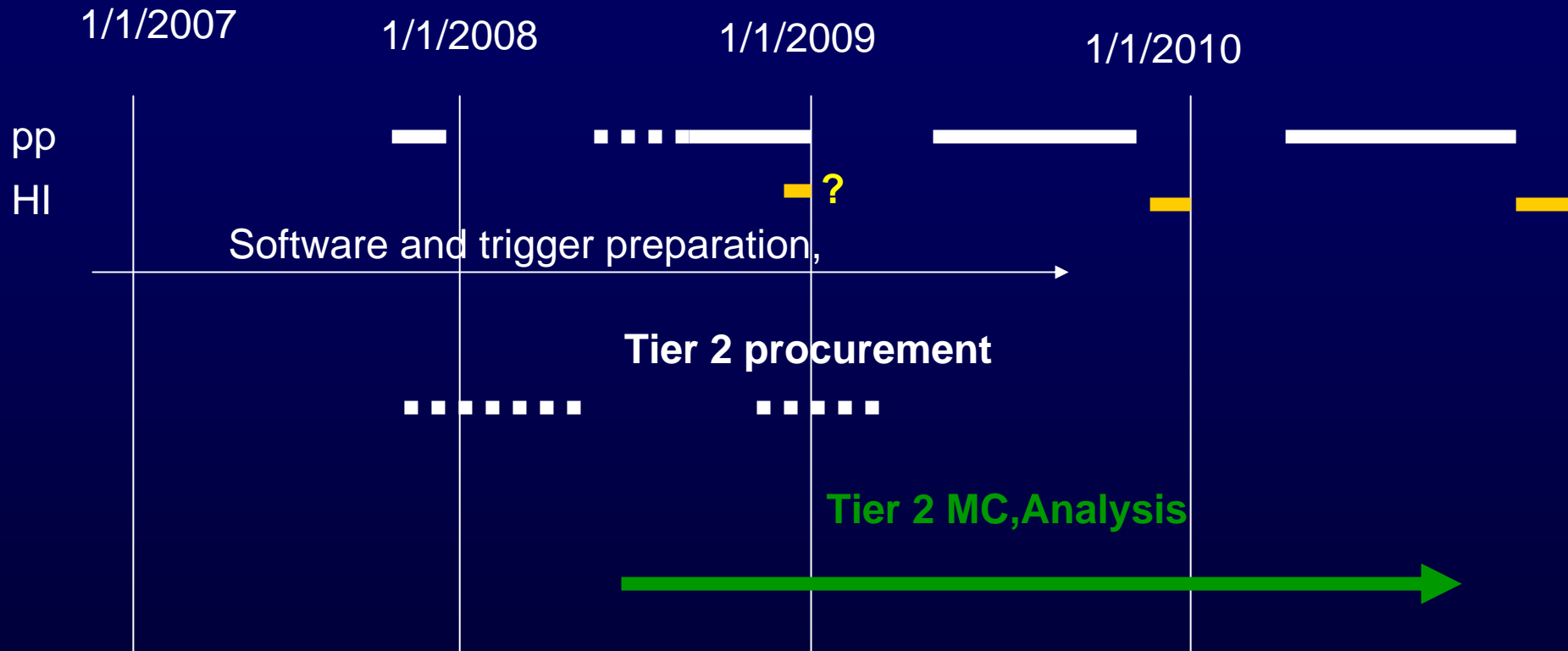
All group members will continue to be involved in RHIC physics through participation in PHENIX and STAR.

Backup

Group current Activities and expertise

- Leading day-one and pp min bias effort (Steinberg, Moraes, Baker)
- Leading ZDC hardware Project (S.White). Significant progress toward integration with ATLAS.
- Expertise in low-x physics (R.Debbe)
- Expertise in multiplicity based analysis (R.Nouicer)
- Strong interest and knowledge in tracking, jet-correlations (Jiangyong Jia, JHLee, Videbaek)

LHC schedule and Computing Needs



BNL USATLAS HI FTE projections

	FY06	FY07	FY08	FY09
People (HI)	5	8	7 8 (+1)	7 8 (+1)
FTE (HI)	1.5	3.9	4.3 5.3 (+1)	4.3 5.3 (+1)
People (HEP)	3	3	3	3
FTE(HEP)	1.5	1.5	1.5	1.5

Top: assuming no new funding.

Lower requested with new incremental funds at BNL for additional activity (Post Doc)